

Science Now Is Able To Make Negroes White

Startling Experiments That Seem to Prove That by Transplanting a White Baby's Suprarenal Glands Into a Black Child the Negro Would Grow Up with as Fair a Skin as Any Caucasian



This Little Black Baby's Coloring, Now Says Science, Is Entirely a Matter of Secretions from the Glands Above the Kidneys Called the Suprarenals. Look at the Photograph Opposite.

By Dr. W. H. Ballou

WHY is a man white, black, brown or yellow skinned? This age-old problem seems to have been settled except in certain minor details.

Color of the skin is due to substances which exude from the twin glands or capsules above the kidneys, called the suprarenals. This announcement is made by Professor Arthur Keith, president of the British Association for the Advancement of Science, one of the most celebrated anthropologists in England. Other scientists have been making researches along the same line.

It has been observed in several cases that white persons with disease of the suprarenals began to turn black, or, more often, yellow; while other colored persons affected by the enlargement of the suprarenals began to turn white or other shades different from the race to which they belong. Hundreds of observations led to the inevitable conclusion that one of the functions of these glands was to regulate the color of the skin.

At the same time it has been found that the development of the various ductless glands of the body determines all the physical characteristics that distinguish the racial types of mankind from one another. While the suprarenal glands make the negro, a certain type of thyroid gland produces the characteristic features of the Mongolian, and the pituitary gland in the brain produces the strong, regular facial features of the European white man—especially the prominent nose and brows. In support of this are cases in which Europeans without a trace of Mongol ancestry have developed perfectly Mongolian features simply because they had thyroid disease, while at least one Chinese is said to have owed his European features to an enlarged pituitary. Upon this point Professor Keith makes this remarkably interesting observation:

"Some years ago there died in the East End of London a Chinese giant—the subject, we must suppose, of an excessive action of the pituitary gland—the gland I regard as playing a predominant part in shaping the face and bodily form of the European. The skeleton of this giant was prepared and placed in the museum of the London Hospital Medical College by Colonel H. J. Openshaw, and any one inspecting this skeleton can see that, although certain Chinese features are still recognizable, the nasal region and the supra-orbital ridges of the face have assumed the most prominent European type."

Equally remarkable are the many hospital cases that prove that the suprarenals determine the color of the skin. Dr. Thomas Addison, of Guy's Hospital, London, found in several cases that a partial destruction of the suprarenals caused a darkening of the patient's skin. This seems to show that the normally working suprarenals of the white man cause pigment cells to be dispersed throughout the system instead of being accumulated under the skin, as in the negro.

Still more remarkable was a case reported from the Free Hospital, Zanzibar, East Africa. Here a colored woman patient was suffering from a severe kidney disease. The surgeon, in a desperate effort to relieve the sufferer, transplanted the suprarenals of a white man who had just been killed in an accident.

The result was not only an improvement in the general condition of the patient, but, much more remarkable, the negro gradually became a yellowish-white. The eventual outcome of this operation is awaited with the keenest interest by the scientific world.

While it is certain that the color of the skin can be changed by disease of the suprarenal glands after the sufferer has reached maturity, it is believed that to affect this by transplantation the object of the experiment should be selected while in babyhood or, at least, early childhood. The Zanzibar case is not regarded as a

precedent. Furthermore the transplantation of the glands is one of the most delicate and difficult of operations and the chances at present almost solidly against recovery. Not until the technique of surgery is vastly improved would such an operation be attempted except as a last resort to save life and with no thought of effects upon skin coloring.

The method by which the suprarenals are



Mme. Karsavina, the Russian Dancer and Beauty, Whose Wonderful Whiteness of Skin Could Easily Be Turned to as Yellow a Tint as That of the Asiatic Woman Beside Her by Changes in the Secretions of Her Suprarenal Glands.

other ductless glands work is through the mysterious "hormones" or blood messengers. The ductless glands pour various kinds of hormones into the blood, and these hormones have an affinity for some particular part of the body, which they stimulate to gather up certain cells of the body—as, for instance, the skin to gather color cells, the bone to collect bone cells, and so forth. In the present state of research we must assume that the hormones of the white man distribute pigmentary matter throughout the body, while those of the colored man direct it to remain under the skin.

"The problem how mankind has been demarcated into types so diverse as the negro, the Mongol, the Indian, the negro and the Caucasian or European has engaged thoughtful minds from the most ancient times," writes Professor Keith. "We are near its solution. There was the Tower of Babel theory of dispersal, for which we have adopted a different explanation.

nation. Noah has disappeared from theory and has been replaced by fossil ancestral stock. Our problem, from the viewpoint of modern research, begins, not at the close of the historical flood, but at the end of a geological epoch of the dim past.

"Shem, Ham and Japheth, the reputed ancestors of the three great racial stocks, white, black and yellow, are likewise buried under intensive research. All of the older theories have given way before the evolutionary machine, yet we are all conscious of the limitations of that machine. We recognize the negro at a glance by his black, shining, hairless skin; his crisp hair, his flattened nose, his widely-opened dark eyes, his heavily molded lips, his gleaming teeth and strong jaws. He has a carriage and proportion of body of his own, his peculiar quality of voice and

action of brain. He, to even the unpracticed eye, is clearly different from the Mongolian native of northeastern Asia.

"So, too, the skin, hair, eyes, quality of brain and voice, the carriage of body and proportion of limb to body pick out the Mongol as a sharply differentiated human type. Still different to negro and Mongol is the native of Central Europe, the Aryan or Caucasian type of man, whom we know by the paleness of his skin, by his facial features, and particularly by his narrow, prominent nose and thin lips. None of the previous explanations, either by imaginative idealists or men of science, in any way account for these and other racial differences. Not even Darwin was on the right track. It is but now that the secret



This Little White Girl's Suprarenal Glands Would, According to This New Theory, Change the Little Black Girl Into One as White if Transplanted. In All Other Respects, of Course, the Negro Child Would Remain a Negro.

processes of nature are being ferreted out.

"The study of the suprarenal glands has brought to light a wonderful mechanism of hormones," continues Professor Keith. "When we are about to make a severe bodily effort it is necessary to flood our muscles with blood, so that they may have at their disposal the material necessary for work—oxygen and blood-sugar, the fuel.

"At the beginning of muscular effort the suprarenal glands are set going by messages from the central nervous system. They throw a hormone, adrenalin, into the circulating blood, which has a double effect. Adrenalin acts on the flood-gates of the circulation, so that the major supply of blood passes to the muscles. At the same time its acts on the liver, so that the blood passing through that great organ is laden with blood-sugar. We here obtain a glimpse of the neat and effective manner in which hormones are utilized in the economy of the living body. Also we get the clue to acromegaly—that remarkable disorder of growth.

We see how hormones co-ordinate further in all bodily activities; how our bodies respond to the burdens they are made to bear; how our muscles increase in size the more we use them—a useless increase unless the bones are strengthened in a corresponding degree; how a greater blood supply ensues to feed the heart; how more oxygen increases the lung capacity; how more fuel is applied by the digestive, assimilative and mastication apparatus, etc.

"We are here dealing with a suprarenal gland mechanism of hormones, in which the pituitary gland is also concerned. All pathological disorders follow when this mechanism or any part of it becomes disordered. Disrupt a single one of the hormones and some type of abnormality ensues. It is obvious that herein lies the explanation of racial differences."

Professor Keith proves that racial colors of skin are demarcated types, not evolutionary; that is, that there is a fixed gulf between them. If the types were evolutionary, we would have a brown race evolving from the original black race; the brown race evolving into the yellow race, and, finally, the yellow race evolving into the white race. That no such evolution took place is shown in the fact that the negro who has either migrated or been forcibly removed to all other climates outside of Africa remains wherever placed as black as ever.

Even intermarriage has not taken the black pigment away from him. In spite of frequent intermarriage, he has retained

his dark color. The color of the octoroon is the nearest white he has ever been able to attain, the black strain remaining, as was easily determined by an analysis of the blood corpuscles. The whites who have long resided in Africa are still white. The whites who have occupied America for 500 years are still white, showing no tendency to turn red like the native Indians. Mongols retain their yellow skin wherever they go. So we know positively that skin color is local, and that the pigments which cause it are local manifestations.

John Hunter, the famous surgeon, argued 150 years ago that the skin of all men was originally black and that the color gradually cleared away. Professor Keith considers that this view is supported by recent discoveries. In his view the suprarenals of the white man have developed the power to clear away the pigment from the skin.

Many astonishing changes in the human body have been noted when there was an overgrowth of the suprarenals. In such cases there was no change of color, but there was an abnormal gain in strength, not a growth of weak, useless giantism, as when the thyroid is enlarged, but a development that made them real supermen.

Professors Bulloch and Sequeira noted that a boy with overdeveloped suprarenals became tremendously full chested, muscular, deep voiced, bearded—a miniature Hercules, a marvel of power in brain and body. Young girls with overdeveloped suprarenals had very strong features, powerful bodies and masculine characteristics.

Thus we learn that the suprarenals are concerned in producing the most forceful types of mankind, as well as regulating color.

While it may be proved that the suprarenals determine skin color, there are still many points about the origin of color to be settled, for we have yet to learn why the negro has one kind of suprarenal gland and the white man a different kind. Several theories have been advanced as to the origin of color. Professor Lull, of Yale, in his work on "Organic Evolution," says: "Coloration is doubtless dependent upon the chemical material of which any organism is composed, and the hue is entirely due to the absorptive powers of that substance (through the innumerable pores of inner and outer skins). Since oxide of iron is red, so is the blood of vertebrates. Since oxide of copper is bluish green, so is the blood of the octopus, and so on. In many cases the color of internal organs may be due entirely to the nature of the food consumed. Thus, the flesh of the brook trout caught in Central Massachusetts, where there are few crustaceans available for food, is pale. In the Adirondack lakes, where the crawfish is abundant, trout which eat it have a deep salmon pink flesh. Thompson states that the pigment substances are primarily waste products, reserve products, or by-products of the animal's metabolism (chemical composition). Pigments may have protective, warning or other real values."

"Definitely localized spots of coloring matter are sometimes associated with end organs of the nervous system. The pigment absorbs light, indirectly stimulating the nerve, and thus acts as a light perceptible organ. All eyes have this for their basic principle, but accessory organs also have light-perceptive value. Other pigments found in fur or feathers may serve to absorb or reflect heat, adding value to coloration therefrom. Dark pigment has served the negro and other dark races to cut off the ultra-violet rays of light, which from their physiological action cause such discomfort to humanity."

In the tropics pigment is black. As one recedes from the direct rays of the sun it becomes brown, then yellow, and, finally, white in Central Europe and equivalent zones, where sun rays are minimized.

Professor Louis Agassiz maintained that certain areas, widely remote from each other, at differing earlier periods of the earth's history, were alone able to evolve and support life. On these areas arose distinct fauna of animals and flora of plants. On each one of these areas a type of man gradually evolved, associated with distinct animals and plants.

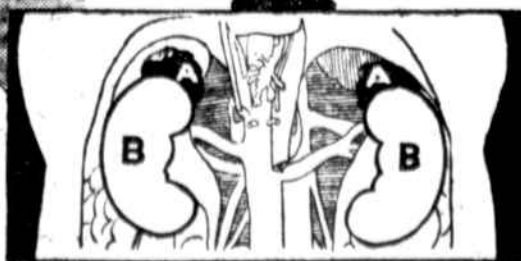


Diagram Showing the Location of the Suprarenal Glands (A) Above the Kidneys (B). It Is These Glands, Science Has Just Discovered, Which Make White, Black, Red, Brown and Yellow Skins.